Information Concerning Guidelines for
Translated Documents

Summary of Interviews and Research

This report details summaries of various interviews conducted with experts in the field of translation. The research questions at hand included:

➢ What are appropriate guidelines for translating written materials?
➢ Are you aware of any readability analyses to determine the reading level of non-English documents?
➢ How is the equivalency in reading level of English documents and the corresponding non-English documents determined?

Most experts who were interviewed were not aware of any readability analysis formulas or software for foreign languages. This method for assessing equivalency in reading level was not supported given the complexity of cognitive processes in reading comprehension, the difference in the structure of languages, and many other factors that contribute to a well-translated document. The little research found which used readability analysis (see below Bernard et al., 2001) discussed a number of notable drawbacks to the use of such measures. Nevertheless, different types of readability analyses and the methods for their use are presented in this report.

Appropriate procedures and guidelines for the translation of written documents are also outlined. Experts interviewed all emphasized the importance of using only professional and certified translators to translate documents as they have the necessary training and a profound understanding of the target language. When there is a question of understanding and reading level, most experts also recommended the use of focus groups from the target population in order to ensure understanding and cultural appropriateness.

Interviews

Brunilda Torres, Director
Office of Minority Health
Massachusetts Department of Public Health

Brunilda Torres, director for the Office of Minority Health at the Massachusetts Department of Public Health, authored the report "Best Practice Recommendations for Hospital-Based Interpreter Services" (hereafter referred to as "Best Practices"). "Best Practices" identified and described the components of an optimal interpreter services program for hospitals throughout the State of Massachusetts (see Appendix A for Best Practices report). A section and appendix of this report included guidelines for the translation of written materials.

Due to the fact that there was no reference of conducting readability analyses for non-English documents a follow-up phone call was made to Torres to discern whether she recommended such a practice. Torres stated she would be very reluctant to apply a readability analysis to the translated material because language structure varies greatly from language to language. Torres also stated that readability analysis would not take into account things such as idiomatic expressions would not be taken into account.

Torres sent the "Guidelines for Translation of Written Materials" and recommended the method it outlined (see Appendix B). She offered one caveat to the "back translation" method is to ensure the original English document is coherent and well written before it is translated into the target language. If it is poorly written in English, the end product will possess similar level of coherence in the target language.

Jenya Krein, Professional Translator
Office of Refuge and Immigrant Health
Massachusetts Department of Public Health

Jenya Krein is a professional translator for the Office of Refuge and Immigrant Health and offers technical assistance concerning the implementation of their guidelines for interpreter and translation services. When I asked Krein specifically what type of procedure they followed concerning the assessment of literacy levels for the translation of written materials she referred me to some literature put out by the California Department of Health Services titled, "Guide Book to Effective Materials Development for Health Education," (section 3 addresses written materials and literacy levels for non-English speakers – see below).

Krein then went on to tell me that assessing literacy level of the target population requires much more than using a formula on already translated documents. Krein gave an example of when she translates a document into Russian (her native language) she must be very careful not to translate the materials into a *lower* reading level. Krein explained that in Russia the media and press distribute news in a very formal and structured manner and at a reading level that is in general, quite high. According to Krein, Russians immigrants to the U.S. who receive information that is written at a much lower reading level not only feel insulted but also question the validity of such information. Krein emphasized the absolute need to thoroughly research and know your target population and that it was an essential component of any translation.

Translation Agency (French, English, Danish)
Copenhagen, Denmark

The Translation Agency was not aware of the readability analyses for foreign languages, aside from the one known in its own native language, Danish. However, a formula for readability analysis is not used during this agency's translation process. All translators are educated and trained to assess the source text and reproduce it in the translation.

According to the Translation Agency, determining the equivalency of meaning and readability in a translation is not as simple as applying a formula and involves technical expertise in the translation process and a deep understanding of both languages. It depends upon readability analysis as opposed to having an expert translator (not a practice Translation Agency would recommend). In addition, translators who have the necessary skills and understanding of the language would most likely not need to use such a formula.

This is the process roughly outlined by the Translation Agency:

Our translation process usually goes like this (we only translate non-literal texts):

1. The translator (who speaks the target language as native language) assesses the level of the text, the target reader, etc., and adapts the translation accordingly. Another person proofreads and finalizes the text before it goes back to the client.

2. Sometimes, in case the client wishes it, we provide a back translation (by another translator) to make sure that there are no misunderstandings in level or meaning. However, this is quite rare as it is part of an educated and trained translator's job to adapt a source text to a target language. Back translations are the most common in extended marketing texts, where you sometimes have to completely change the text in order to make it sound right in the target language; there the client would like to know what images are being used in the different languages.

3. Sometimes, when the translation has to be "legally binding" (birth certificates, contracts, etc.), we can "confirm" the translation. The translation is the same, but authorized translators can give the translation a stamp that makes it legally valid.

Alex Rainof, PhD.
Associate Professor of German, Russian, and Romance Languages and Literatures
Department at CSU, Long Beach
Director of National Association of Judiciary Interpreters and Translators
Vice President of the Society for Study of Translation and Interpretation
Chair of the LA Chapter of California Court Interpreters Association

I first explained to Dr. Rainof that we wanted to assemble some guidelines and tools for departments within the State of California in order to improve the translation of written documents. I relayed that some translated documents were not being translated at the appropriate level and were difficult for the target population to understand. I asked him whether there was a set of standard guidelines for translating documents and whether there were any tools to ensure the accuracy of those translated documents. Rainof replied that this would most likely be impossible to accomplish because due to all the different types of documents, the types of languages and reading levels of various target populations. One set of guidelines could apply for one language but not for another as syntactic levels, terminology, and language structure vary from language to language. Rainof said that translation is not something that should be assigned to a bilingual state

employee who does not have the appropriate training and certification of a professional translator.

I proposed the example of having a medical brochure written in English at the 6th grade level that needed to be translated into Spanish. I asked Dr. Rainof what could be done to ensure equivalency in reading level. He said I was referring to something called "register." Rainof recommended a book that addresses register in translations ("The Bilingual Coatroom" by Dirk Seligson). When I asked him about a readability analysis to ensure the equivalency in meaning he said that a professional translator has the training and understanding of both languages to assess this equivalency. Rainof had some apprehension about readability analyses. He had never heard of nor used any for formulas for evaluating foreign language reading level and if they do exist it would be difficult to be certain the rating given by an English readability formula (e.g., Flesch Kincaid) was equivalent to the rating given by Spanish readability formula. For example, how do we know that the 6th grade reading level was determined using equivalent criteria in Spanish that was used in English? Furthermore, how can criteria be equivalent in different languages? In addition, grade levels in certain cultures are also set up entirely different than in the United States.

Rainof suggested contacting the American Council for the Teaching of Foreign Languages as they may have some way of assessing levels of competency of languages. Also recommended by Rainof was the use of focus groups. That is, assemble people within target group who are going to be receiving the document in order to determine whether they can comprehend its message. Rainof has used this in some work he is doing with behavior modification psychologists at UCLA. They are creating documents and using Spanish focus groups to ensure proper translation and understanding. Rainof did warn that when using this method, focus groups must be selected carefully to ensure they match the target population. In addition, it is important to ensure that the *English* document is written for the target population. If you have a poorly written English document you will most likely end up with a poorly written target language document (this concern was also voiced by Brunilda Torres).

Research Articles and Guidelines

Guidebook to Effective Materials Development for Health Education
Chapter 3: "Rules of the Road: Guidelines for Developing Low-Literacy Materials"
Ana C. Matiella, M.A.
Tobacco Control, California Department of Health Services (DHS)

This section of the guidelines (see Attachment C) developed by DHS outline a method for developing written materials for low literacy populations. While Matiella (1991) did not discuss translation considerations, she did discuss the use of readability analysis as a means for ensuring appropriate grade level. Matiella brought up more concerns than benefits for using readability analysis. Matiella stated that, "Generally, readability tests are inadequate, because they consider only one source of information –

the written text. And they consider that text in a limited sense, using only two factors – word length and sentence length."

Another concern voiced by Matiella was when writers try to "fix" the material "using word length and sentence length as the two criteria." Mateilla warns, "trying to fix the text this way makes matters worse. You end up with choppy sentences without the necessary referents or with sentences and words that sound trite and patronizing." Specifically, "Readability formulas disregard text organization, interest and visual appeal…disregard the reader's prior knowledge of or familiarity with the subject, setting, approach and medium…don't access or evaluate visual and other features of the piece that can enhance readability."

At best Matiella states that readability analyses should play a minor role in the text development process. Matiella gives final advice stating that the best readability test "is a field test of the material with the intended audience" and "No readability formula can assess readability better than direct consultation with the people for whom the materials are written." It should be noted that this report briefly details ways in which to assess the target population, choose content, and sculpt a written message appropriate for low-literacy populations.

"Translating for Interpreters"
Cynthia Migueléz
American Translation Association, Chronicle (February, 2000)

Migueléz (2000) outlines information concerning concepts in translation (see Attachment D). This article is particularly relevant to the current research as it defines different concepts and issues translators must take into account in order to ensure equivalency of meaning of translated texts. Literal translations (translating text word for word) most often do not work given differences in language. When a translator translates text he/she must concentrate on the meaning and flow of the text in the other language. This could likely change the readability level of a text when being translated from one language to another; however, the meaning becomes clearer than if a literal translation were made. One such example in translation is "insertion/omission" for which Migueléz offers the following example:

"…the restatement of a proper noun or of a referent is often necessary in English when it is understood or implied in Spanish: *Por sus dimensiones y estructura ha alcanzado el nivel deseable de expansión...*(Literally, "Given its dimensions and structure, it has reached the desired level of expansion"). English version: "As a result of its size and structure, our University has reached the desired level of expansion."

Another concept called transposition is a change in syntax or structure to enhance meaning and to reflect correct usage in another code. For example, the literal translation

of a Spanish phase to English is "the University of Alicante is characterized in a fundamental way by its dynamism." A translation which takes into account English syntax and structure is "dynamism has become a fundamental characteristic of the University of Alicante." *The Flesch Kincaid rates both of these phrases with a 12.0 grade reading level and does not differentiate between the two texts for true readability characteristics such as flow and proper use of the English language.*

Other concepts addressed by Migueléz include transference, modulation, compensation, synonymy, and functional/descriptive equivalency. These concepts offer examples of consideration translators must take into account to ensure equivalency in translated text. Readability analysis formulas address none of these considerations.

Readability Analysis and Research

Berland GK, Elliott MN, Morales LS, Algazy JI, Kravitz RL, Broder MS, Kanouse DE, Munoz JA, Puyol JA, Lara M, Watkins KE, Yang H, McGlynn EA. Accessibility, Quality, and Readability in English and Spanish. *Journal of the American Medical Association*, Vol. 285, No. 20, May 23, 2001, pp. 2612-2621

Research conducted by RAND Publishing researchers and published in the Journal of the American Medical Association (see Attachment E) analyzed the reading level of health information published in English and Spanish on the Internet. The readability analyses used to evaluate reading levels in English and Spanish included the Fry Readability Graph (FRG) and Lexile Framework. FRG has been validated for Spanish and English-language documents (Gilliam, et al., 1980; Fry, 1969, 1977).

How FRG works:

Uses three sample passages of text, each exactly 100 words in length, from the beginning, middle, and the end of the source document. The grade level is computed as a function of the number of sentences and words contained in the three samples of text. Application of the FRG to Spanish-language documents is similar to its application to English-language documents, with the exception of syllable counting. In Spanish an adjustment compensates for the fact that Spanish text contains more syllables per word than English text of the same reading level (Gilliam, Pena and Moutain, 1980).

How Lexile works:

A relatively new software program that estimates the readability level of a document based on two factors: average sentence length and word familiarity. Passages consisting of shorter sentences are assumed to be easier to read than passages consisting of longer sentences. Passages consisting of familiar (commonly used) words are assumed to be easier to read than passages consisting of unfamiliar words (Wright and Strener, 1998). Word familiarity is measured by the frequency with which a given word is used in written United States school texts of various grade levels (Carroll, et al., 1971).

Limitations of using readability analyses according to above study:

"It is widely acknowledged that reading is an interactive process that occurs between the text and the reader. In fact, research shows that readers use experiences, knowledge, and information processing skills to comprehend text (Johnston, 1983).

Readability formulas, being strictly text-based, do not address the interactive nature of the reading process. Most reading formulas, including those used in this study, employ syntactic and semantic factors and do not directly address factors related to communicating meaning. For instance, readability formulas do not distinguish between written discourse and nonsensical combinations of words (Dreyer, 1984). Moreover, formulas cannot assess other critical factors such as the reader's interest, experience, knowledge or motivation, all of which may influence the reader's ability to comprehend the cognitive task asked by a survey (Duffy, 1985). Other factors related to readability and not assessed by a readability formula include typographical and temporal factors (e.g., time allotted to complete the reading task), the cultural appropriateness of materials intended racial/ethnic and linguistic minority groups, and factors related to the unique nature of the Internet."

Washington State Department of Social and Health Services (DSHS)
Language Testing and Certification Unit

Due to a culmination of lawsuits and civil rights complaints brought against DSHS for not providing equal access to services for Limited English Proficient clients they initiation an effort to certify medical and social service interpreters and translators and have developed a standardized certification test.

Washington State has a classification called "Language Specialist" for which the duties seem very applicable to the research question at hand. These language specialists are hired for target languages (job description in Appendix F). After speaking to one of the language specialists (in the certification testing program) he informed me that he uses the Gunning Fox Index (see formula below) to determine reading level in the foreign language. There is no software program for this and it must be done by hand. Language specialists also work with subject matter experts in the field related to document they are translating. For example language specialists may consult with lawyers, physicians, psychiatrists, etc. (depending on the type of document they are translating) in order to make certain that documents have not lost meaning in the translation.

There is no set criteria or reading level for translated materials as it depends on the 1) type of document being translated, 2) the reading level in English, and 3) the reading level of the target audience.

How Gunning Fox works:

Gunning Fog Index
The Fog Index measures readability for upper elementary and secondary ages.
Select several samples of 100 words and apply the following steps:
1. Count the number of words in the sample.
2. Count the number of sentences
3. Count the number of big words (3 or more syllables)
4. Calculate the average sentence length. Divide the number of sentences into the number of words.
5. Calculate the percentage of big words. Divide the number of words into the number of big words
6. Add the average sentence length to the percentage of big words
7. Multiply the result by .4. The resulting number is the readability grade level.

Note: Given what was said above with regard to the number of syllables in Spanish as compared to English this would not be appropriate for Spanish and lists no validity evidence of being applicable to other languages.

TextQuest

TextQuest is a software package (see web site print out Appendix G) that offers, among other things, readability analyses for English, French, Spanish, German, Danish, Dutch, and Swedish. It offers 39 different formulas based on syntactic criteria like sentence length, word length, etc and the type of document type (e.g., manuals, normal text, news, children's books, etc). There is no information offered at this web site as to how the analyses were developed or if they were validated.